

Town of Kennebunkport, ME

P.O. Box 566, Kennebunkport, ME 04046
ph: 207.967.4243

Kennebunkport Fire Department

POLICY 6 RESPIRATORY PROTECTION PROGRAM

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Purpose

The Kennebunkport Fire Department has determined that firefighters who respond to Structural Fires, Hazardous Materials Incidents, Vehicle Fires, Dumpster Fires, Special Rescue Situations, and other incidents may be exposed to respiratory hazards during these operations. These hazards include smoke, heat, oxygen deficiency, known and unknown toxic gases which in most cases present working environments that are Immediately Dangerous to Life and Health (IDLH)

The use of Self Contained Breathing Apparatus (SCBA) shall be the first line of defense against these respiratory hazards. Engineering Control such as ventilation may be used when the Officer In Charge (OIC) is able to determine, by metering, that no hazard exists. Metering must be specific and the OIC must be positively certain that no hazard exists. Ventilation during structural fire fighting shall not be considered as a substitute for the use of SCBA.

Scope and Application

This program applies to all firefighters who are required to wear SCBA during fire fighting or other emergency activities. All firefighters who perform duties requiring the use of SCBA must be enrolled in the Kennebunkport Fire Department Respiratory Protection Program. The Kennebunkport Fire Department shall be responsible for any expenses resulting from the firefighters participation in the Respiratory Protection Program.

Responsibilities

Fire Chief

The Fire Chief shall have the overall responsibility of the administration of the Respiratory Protection Program including:

- Development of the Respiratory Protection Program
- Development of Policies, Rules and Regulations
- Budgeting for the program implementation
- Appointment of Respiratory Protection Program Administrator
- Determining those firefighters required to participate in the program.

Program Administrator

The Program Administrator is responsible for administering the respiratory protection program. Duties of the program administrator include:

- Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
- Selection of respiratory protection options.

Monitoring respirator use to ensure that respirators are used in accordance with their certifications
Arranging for and /or conducting training.

Ensuring proper storage and maintenance of respiratory protection equipment.

Conducting qualitative fit testing with Banana Oil (isoamyl acetate) or a similar agent.

Administrating the medical surveillance program.

Maintaining records required by the program.

Updating the written program, annually and as necessary.

Will ensure an adequate supply of cleaning and disinfecting material at the fire stations as well as field

cleaning material.

Shall ensure that air tanks are re-supplied with compressed air that meets a minimum of Grade D Quality.

Providing to the physician the necessary information about the standard including a copy of the Kennebunkport Fire Department program, a copy of the respirator Protection Standard, a list of hazard encountered in the work environments, and for each fire fighter requiring evaluation; his or her work area or job title, proposed SCBA type and weight, length of time required to wear SCBA, expected physical work effort, potential extremes, and information regarding type and weight of protective clothing.

The Respiratory Protection Program Administrator for the Kennebunkport Fire Department is the Fire Chief or his designee.

Supervisors

Company Officers are responsible for ensuring that the respiratory protection program is implemented. In addition to being knowledgeable about the program requirements for their own protection, company officers must also ensure that the program is understood and followed by the firefighters under their charge. Duties of the company officers include:

Ensuring that firefighters fire fighters under their supervision (including new joins), have received appropriate training, fit testing, and medical evaluations according to the schedule.

Ensuring the availability of SCBA.

Being aware of tasks requiring the use of SCBA.

Enforcing the proper use of SCBA when necessary.

Ensuring that SCBA are properly cleaned, maintained, and stored according to the respiratory protection program.

Ensuring that SCBA fit well and do not cause discomfort.

Continually monitoring work areas and operations to identify respiratory hazards.

Report to the Program Administer or the Fire Chief should a firefighter have difficulty wearing or when using an SCBA.

Coordinate with the Program Administrator how to address respiratory hazards or other concern regarding the program.

Kennebunkport Fire Department Supervisors include all line officers and any senior member who is in a command position because of the lack of a line office available for the situation.

Firefighters

Each firefighter has the responsibility to wear his / her SCBA when and where required and in the manner in which they were trained.

Each firefighter must also:

Care for, maintain, and store their SCBA an instructed.

Inform their supervisor if the SCBA no longer fits well, and request a new one that fits properly.

Inform their supervisor should they have difficulty when wearing or using an SCBA. Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the work place and any other concerns that they have regarding the program.

Program Elements

Selection Procedures

The Kennebunkport Fire Department currently uses one brand of SCBA utilizing Scott 4.5. This model SCBA IS NIOSH certified and shall be used in accordance with the terms of that certification. Firefighters shall annually be fit tested to this model of SCBA.

Hazard Evaluation

The Program Administrator shall conduct hazard evaluations for each operation, process, work area, or job function to determine when respiratory hazards may occur and to make recommendations for policy changes regarding the use of SCBA.. The Hazard identification will include:

- (1) Identification and development of a list of hazardous operations where respiratory hazards may be encountered.
- (2) Review of work processes to determine where potential exposure to respiratory hazards may occur. This review shall be conducted by surveying the workplace, reviewing the operations, and talking with firefighters and supervisors file
- (3) Exposure monitoring to ensure the proper use of SCBA.

The results of the current hazard evaluation are as follows:

Structural Firefighting: For years structural firefighting has been known to pose a potential respiratory hazard. This hazard has only increased with the amount of plastics and synthetic material used in construction and home furnishings. Ventilation, even the use of positive pressure ventilation cannot ensure the lack of respiratory hazard. Therefore, all members of the Kennebunkport Fire Department engaged in interior structural firefighting shall use SCBA from the point where the OIC determines the environment to be IDLH until overhaul is complete and the fire is determined to be out by the OIC. Firefighters who are performing exterior functions at a structural fire may be required to use SCBA, depending on the operation and potential hazard as determined by the OIC, Safety Officer or the Company Officer.

Vehicle fires are known to produce toxic gases that may be IDLH. Firefighters who engaged in vehicle firefighting operations who may be exposed to the products of combustion shall use SCBA while performing these operations.

Dumpster fires, or others (which are not classified as structure fires) when involved in fire may present respiratory hazards. Firefighters engaged in these operations when they are, exposed to the products of combustion shall use SCBA while performing these operations.

Hazardous Materials Incidents. Firefighters who respond to Hazardous Materials Incidents may be exposed to a variety of known and unknown respiratory hazards. SCBA shall be worn by firefighters while working in the Hot Zone, Warm Zone, and Decontamination Line as determined by the OIC.

Special Rescue Situations may include Below Grade, Confined Space and areas where the OIC cannot ensure the quality of the atmosphere. In those cases fire fighters shall use SCBA.

Engineering controls such as ventilation may be used provided constant monitoring can ensure with certainty the quality of the atmosphere in the rescue environment.

Other, Respiratory Hazards. Nothing in this policy is intended to restrict the OIC from requiring fire fighters to use SCBA when he /she suspects a potential respiratory hazard. OIC's are encouraged to adequately size-up each situation and to consider the safety of the fire fighter when making decisions regarding SCBA use.

Updating the Hazard Assessment

The Program Administrator shall revise and up date the hazard assessment annually and as needed (i.e. any time through new technology or new processes changes occur that may effect the atmosphere in the working environment that may potentially affect fire fighter exposure.)

Medical Evaluations

Fire fighters who are required to wear SCBA must pass a medical exam before being permitted to wear SCBA on the job. Fire fighters are not permitted to wear SCBA until a physician has determined that they are medically able to do so. Any fire fighter refusing a medical evaluation will not be allowed to work in an area requiring SCBA use.

A licensed physician at Workwell or a Licensed Healthcare Provider designated by the firefighter will provide the evaluation. Medical evaluation procedures are as follows:

The medical evaluation will be conducted using the questionnaire provided in Appendix C of the respiratory protection standard.

To the extent feasible, the Kennebunkport Fire Department will assist any firefighter who may be unable to read the questionnaire (by providing help in reading the questionnaire). When this is not possible, the firefighter will be sent directly to the physician for medical evaluation.

All affected firefighters will be given a copy of the medical questionnaire to fill out, along with a stamped and addressed envelope for mailing the questionnaire to the company physician or their designated LCHP.

Follow up medical evaluations will be provided to firefighters as required by the standard. Medical examinations will be conducted as required by the physician.

All fire fighters will be granted the opportunity to speak with the physician about their medical evaluation, if they so request.

After a firefighter has received clearance and begun to wear SCBA, additional medical evaluations will be provided under the following circumstances.

Annual after the age 40.

Every two years between the ages of 35 - 39

Every five years up to age 34, or,

Firefighter reports of signs and / or symptoms related to their ability to use an SCBA, such as shortness of breath, dizziness, chest pains, or wheezing.

The physician or supervisor informs the Program Administrator that the firefighter needs to be reevaluated.

Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation.

A change occurs in the workplace, that may result in an increased physiological burden on the firefighter.

All examinations, evaluations and questionnaires are to remain confidential between the firefighter and the physician.

Fit testing is required for all firefighters wearing SCBA.

Fit testing will be conducted in accordance with the following schedule;

Prior to being allowed to wear any SCBA.

Annually

When there are changes in the firefighter's physical condition that could affect respirator fit (obvious changes in body facial scarring, etc).

Firefighters will be Fit Tested with the make, model, and size of the SCBA that they will actually use.

The Program Administrator will conduct fit tests using a device designed for the purpose; or following the Banana Oil (isoamyl acetate) Protocol in Appendix B (B4) of the Respiratory Protection Standard.

Respirator Use

SCBA use if required for all firefighters engaged in the following fire fighting activities; Structural Fires, Hazardous Materials Incidents, Vehicle Fires, Dumpster Fires, and Special Rescue Situations, or any incident which may cause exposure, to a respiratory hazard.

General Use Procedures

Firefighters will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the SCBA shall not be used in a manner for which it is not certified by NIOSH or by its manufacturer.

All firefighters shall conduct "USER Seal Checks" each time that they wear the respirator.

Firefighters shall use either positive or negative pressure check (depending on which test works best for them) specified in Appendix B-1 of the Respiratory Protection Standard.

Firefighters who detect operational problems or experience failure of the SCBA will immediately notify their supervisor, sound their PASS Alarm, and leave the hazardous environment with their partner.

Firefighters are not permitted to wear any, ear protection, eye protective hoods in any manner that may interfere with the face to facepiece seal. Facial hair or other hair style may not interfere with the face to facepiece seal.

Interior Structural Fire Fighting

Firefighters engaged in Interior Structural Firefighting shall;

Use SCBA for all fires beyond the Incipient Stage or as directed by the OIC

Continue to use SCBA until the completion of "Overhaul".

Work in a minimum of pairs and maintain voice or visual contact with members of each team.

Be supported by two standby members who are available for immediate rescue interior firefighters, at each point of entry. Each standby member shall be dressed in full-protective clothing and have SCBA immediately available to them. The function of one of the stand-by members shall be the accountability of the firefighters inside the building. The other stand-by member may assume other duties including may assume other duties including OIC, or pump operator provided this individual is able to perform rescue assistance without jeopardizing the safety or health of any firefighter working at the incident.

Nothing herein shall prohibit the OIC from establishing a Rapid Intervention Team (RIT) to replace the two firefighters outside, provided a RIT team is established for each point of entry.

In the event that the OIC determines the need to perform Emergency Rescue Activities upon arrival before the assembly of the entire team the OIC must

Notify Dispatch of entry without the two standby members. Enter with a charged handline, perform the Emergency Rescue, and immediately leave the structure. After the incident, document in writing, to the Fire Chief, detailed explanation regarding the deviation of policy.

Use other than Structural Firefighting

For incidents requiring SCBA use other than Interior Structural Firefighting, fire fighters shall use SCBA whenever they may be exposed to environments which may become IDLH or a respiratory hazard, or as directed by the OIC.

When the OIC cannot ensure the firefighter's ability to escape from the hazardous environment, one fire fighter shall be stationed at the point of entry to maintain accountability and be readily available to perform immediate rescue.

Air Quality

SCBA cylinders shall be filled with Grade D compressed air only, The Program Administrator shall ensure that the compressed air maintains Grade D Quality.

Cleaning, Maintenance, and Storage

SCBA are to be cleaned and disinfected after each use, The cleaning policy to be as follows:

Disassemble SCBA, removing cylinder, mask, and PASS

Wash the facepiece and associated parts in a mild detergent with warm water.

Disinfect the facepiece in a diluted bleach solution.

Rinse completely in clean warm water

Air dry in a clean area

Reassemble the SCBA, test the function, replace any defective parts, test the function. Place back on the apparatus, mask is to be stored in an appropriate manner or bag.

Field cleaning of SCBA is to be done using 70 % Isopropyl Alcohol wipes. There will be no sharing of SCBA masks in the field without proper field cleaning.

The Program Administrator will ensure an adequate supply of cleaning and disinfecting material at the Fire Station, as well as field cleaning material. If supplies are low, firefighters, should notify their supervisor who in turn will notify the Program Administrator.

Maintenance

SCBA are to be properly maintained at all times in order to ensure that they function properly and adequately protect the fire fighter. Maintenance involves a thorough visual inspection for cleanliness and defects. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer, except by those trained by the manufacturer to do such repairs. Repairs beyond the scope of our trained repair personnel will be conducted by the manufacturer or their designee.

The following items are to be checked, after each use and monthly. The findings of these checks are to be properly recorded in SCBA Maintenance Log.

Facepiece
cracks, tears or holes
Facepiece distortion
cracked, loose, damaged lens

Headstraps
breaks or tears
broken buckles

Valves
residue or dirt
damage to valve or valve material

Gauges, Regulators & Air Lines;
damage to or inaccuracy
leaks

PASS Alarm;
operation
battery condition

Body Harness;
tells, rips, fraying, or otherwise damaged straps, broken buckles

Cylinder
air supply full
hydrostatic test date
general cylinder condition

SCBA that are defective or that have defective parts, shall be taken out of service immediately. If during and inspection or during use, a fire fighter discovers an SCBA with a defect he/she is to bring the defect to the attention of his/her supervisor.

Supervisors will give all defective SCBA to the Program Administrator. The Program Administrator will decide whether to:

Temporarily take the SCBA out of service until it is repaired
Perform a simple repair on the spot.
Dispose of the SCBA or parts due to an irreparable condition.

When a respirator is taken out of service, it will be appropriately tagged indicating the problem, and stored in the SCBA maintenance room until it can be repaired or sent out for service.

Storage

Storage of SCBA shall be in their designated place on the apparatus. Masks shall be stored in plastic or nylon bags or an appropriate manner to prevent exposure to road dirt and /or contaminates.

Training

Annually, each firefighter shall attend and successfully complete, SCBA training that is based on the current NFPA Standards. Training will include:

The need for respirator use, and how improper fit, usage, or maintenance can compromise the protective effectiveness of the SCBA.

Limitations and capabilities of the SCBA.

How to effectively use SCBA.

How to inspect, Don, Doff, use, and proper seal checks,

Procedures for maintenance, field cleaning, and storage.

How to recognize, medical symptoms that may compromise the safety of the wearer

Program Evaluation

The Program Administrator shall annually and as needed evaluate the respiratory protection program to ensure,

Current written programs are being, effective and properly implemented,

Firefighters are properly using SCBA, and,

The program continues to be effective.

Record Keeping

The Program Administrator shall keep and maintain all documentation in the areas of:

Medical Evaluations

Fit Testing

Training